## Different versions that were used

## August 7, 2023

Here are some of the versions of different software that we used:

# 1 Conda/2022-09-08 on Polaris

This module was used in PointNet-Atlas and FFN Runs on Polaris. The versions of Tensorflow and PyTorch are below:

#### 1.1 TensorFlow

- 1. tensorflow 2.10.0
- 2. tensorflow-addons 0.17.1
- 3. tensorflow-datasets 4.6.0
- 4. tensorflow-estimator 2.10.0
- 5. tensorflow-io-gcs-filesystem 0.27.0
- 6. tensorflow-metadata 1.10.0
- 7. tensorflow-probability 0.17.0

### 1.2 PyTorch

- 1. torch 1.12.0a0 + git 664058f
- 2. torch-geometric 2.1.0.post1
- 3. torch-scatter 2.0.9
- 4. torch-sparse 0.6.15
- 5. torch-tb-profiler 0.4.0
- 6. torchinfo 1.7.0
- 7. torchmetrics 0.9.3
- 8. torchvision 0.13.0a0+da3794e
- 9. torchviz 0.0.2

## 2 JLSE Nodes for AMD MI250

It is a little not so straightforward to run on MI250 on JLSE nodes. I had to install things on a separate environment /home/hossainm/miniconda3/envs/dist-ct-tf-amd-aux-2. Here are the versions:

#### 2.1 TensorFlow

- 1. tensorflow-estimator 2.12.0
- 2. tensorflow-io-gcs-filesystem 0.32.0
- 3. tensorflow-rocm 2.12.0.560

and these were used with another pre-built module  $\operatorname{rocm}/5.5.0$  and  $\operatorname{openmpi}/4.1.1$ -llvm compiler.

## 2.2 PyTorch

PyTorch worked out of the box with one of the pre-built modules. That was conda/amd/2022-01-11.

- 1. torch 1.13.0+rocm5.2
- 2. torchaudio 0.13.0+rocm5.2
- 3. torchvision 0.14.0+rocm5.2

But, these were used with another pre-built module rocm/5.5.0 and openmpi/4.1.1-llvm compiler.

# 3 Frameworks/2023.05.15.001 on Sunspot

We used this framework module on Sunspot. The versions here are:

#### 3.1 TensorFlow

- 1. tensorflow 2.12.0
- 2. tensorflow-estimator 2.12.0
- 3. tensorflow-io-gcs-filesystem 0.32.0

### 3.2 PyTorch

- $1. \ \, {\rm torch} \,\, 1.13.0 {\rm a}0 + {\rm git}6{\rm c}9{\rm b}55{\rm e}$
- 2. torchvision 0.14.1a0+5e8e2f1